



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/669,294	09/23/2003	James L. Hobart	SCI-00602	4649

7590 08/07/2006

HAVERSTOCK & OWENS LLP
ATTN: Jonathan O. Owens
162 N. Wolfe Road
Sunnyvale, CA 94086

EXAMINER

PEFFLEY, MICHAEL F

ART UNIT	PAPER NUMBER
----------	--------------

3739

DATE MAILED: 08/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/669,294

Applicant(s)

HOBART ET AL.

Examiner

Michael Peffley

Art Unit

3739

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 6-13-06.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 19-27, 29, 31, 48, 50-54, 56-63, 65, 66, 68 and 69 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

- 5) ☐ Claim(s) _____ is/are allowed.

- 6) ☒ Claim(s) 19-27, 29, 31, 48, 50-54, 56-63, 65, 66, 68 and 69 is/are rejected.

- 7) ☐ Claim(s) _____ is/are objected to.

- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 9-23-03 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Applicant's response of June 13, 2006 has been fully considered by the examiner. After further consideration of the claims, the examiner has determined that there is insufficient disclosure to support the claimed subject matter. The following is a complete response to the June 13, 2006 communication.

Drawings

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the provide having a shielding structure and a side-firing optical fiber and the probe having a shroud, a beam blocking structure and a slidable fiber optic must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

It is noted that Figures 5b, 5c and 5d show a beam blocking structure and a slidable optical fiber, but no side firing optical fiber. Figures 6a and 6b show the shroud structure, but no beam blocking structure and no slidable fiber optic.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering

of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 19-27, 29, 31, 48, 50-54, 56-63, 65, 66, 68 and 69 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The specification fails to provide a description of a laser system including a shielding structure to block a portion of forward propagated laser energy, and a side firing optical fiber. The only mention of a side-firing optical fiber is found in paragraph [0016] where the suggestion is made of using such an optical fiber. There is no detailed description of such a fiber. Further, it is not clear why the shown shielding structure would be used with a side-firing optical fiber since the laser energy would not be emitted in a forward direction.

Also, the specification fails to disclose a shroud feature with a beam blocking structure as recited in independent claim 48. Figures 6a and 6b show the shroud member and a means to slidably extend the fiber, but there is no disclosure of using a beam blocking structure (as shown in Figures 5b-5d) with such an embodiment.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 19-27, 29, 31, 68 and 69 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 19 is unclear for reciting a side-firing optical fiber used in an endoprobe that includes a shield to prevent forward propagation of laser energy. In particular, the side-firing optical fiber would not propagate laser energy from the tip in the forward direction. Rather, the energy is emitted to the side, as the name suggests. As such, it is counterintuitive to include a forward located shield since the energy would not be delivered in such a direction. Newly added claim 68 is unclear for similar reasons.

Claim 31 is unclear with the added recitation. It appears some words are missing after "angles" (e.g. "for the") that would make the language grammatically correct.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 19-27, 29, 31 and 68 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vassiliadis et al (5,129,895) in view of the teachings of Colvard et al (5,738,677) and Adair (4,782,819).

Vassiliadis et al disclose a laser system comprising a laser source (9) for providing laser pulses, and a laser applicator (11) comprising an endoprobe (15) including an optical fiber (16) with an input end for receiving the laser pulses and an output end. A shielding member (37) is coupled to the endoprobe and protects tissue surrounding the target area to prevent treatment of non-intended tissues (see col. 4, lines 34+). In particular, Figures 5 and 6 shows that the shield member (37) would cover at least a substantial portion of the forward location of the optical fiber (see Figure 6 cross section which shows the shield ends (40) extending substantially below the level of the optical fiber). Vassiliadis et al fail to disclose the use of a trunk optical fiber for coupling the laser source to the delivery optical fiber. Rather, a lens system (10) is used to couple the laser source to the delivery fiber. Vassiliadis et al also fail to disclose the particular use of laser bursts comprising laser pulses.

The examiner maintains that one of ordinary skill in the art is well aware that a fiber to fiber connection may be used to couple a probe to a laser source in lieu of the use of a lens system as taught by Vassiliadis et al. Adair, as addressed in the previous Office action, teaches the use of a trunk fiber (98) for connecting a laser source to a delivery optical fiber (see Figure 8). The examiner maintains that this is an obvious and well-known alternative to the use of a lens system for coupling a laser source to a delivery fiber.

Regarding the use of laser bursts, Vassiliadis et al is silent with respect to the pulse characteristics of the laser source. However, Colvard et al, also addressed in the previous Office action, disclose the use of laser bursts having pulse parameters within those set forth by the applicant. The Colvard et al device is used for treating ocular tissue, just as the Vassiliadis et al device is used. The size of the fiber as set forth by Colvard et al (col. 8, lines 30-40) and the pulse energies, frequencies and durations (col. 7, lines 25-35) are all deemed to be parameters that would be obviously used in the Vassiliadis et al system, particularly since the Vassiliadis et al device is used in analogous procedures.

Finally, the examiner maintains that the various materials used in making optical fibers, such as sapphire and silica, are generally well known in the art and are obvious design considerations for one of ordinary skill in the art.

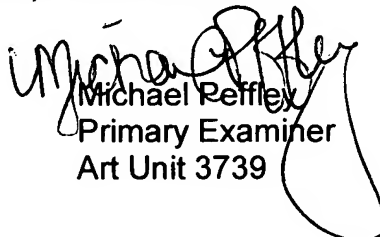
It is deemed to be an obvious modification for one of ordinary skill in the art to have used a trunk fiber to connect the Vassiliadis et al delivery fiber to a laser source in view of the teaching of Adai. To have further provided the Vassiliadis et al system with the particular laser pulse parameters as disclosed by Colvard et al for the treatment of ocular tissue would have been an obvious consideration for one of ordinary skill in the art, particularly since the Colvard et al and Vassiliadis et al systems are used for analogous procedures.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Peffley whose telephone number is (571) 272-4770. The examiner can normally be reached on Mon-Fri from 6am-3pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Linda Dvorak can be reached on (571) 272-4764. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Michael Peffley
Primary Examiner
Art Unit 3739

mp
August 2, 2006